

REMARKS

The rejections of the present Office Action are respectfully traversed and favorable reconsideration is requested in view of the following remarks.

REJECTIONS UNDER § 103

Claims 35-51 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,880,073 to Tomizawa et al. ("Tomizawa"). Independent claim 35 defines, *inter alia*, a method of measuring friction performance of a power transmission fluid using an LFW-1 test apparatus including applying a first power transmission fluid between a block and a ring of an LFW-1 test apparatus and rotating the ring relative to the block from a velocity of about 0 m/s to about 0.5 m/s in about 40 seconds at a constant rate of acceleration and then rotating the ring relative to the block from a velocity of about 0.5 m/s to about 0 m/s at a constant rate of deceleration to provide a cycle. Friction between the block and ring is measured during the cycle.

Tomizawa discloses using a LFW-1 test apparatus, however the test method is completely different from the presently claimed method. In particular, Tomizawa discloses 270 revolutions per minute for 10 minutes. Basically, Tomizawa teaches to turn on the LFW-1 test apparatus, rotate the ring relative to the block for ten minutes at 270 rpm, and then turn off the LFW-1 test apparatus. Nothing in Tomizawa discloses, suggests, or points to a cycle or measuring friction during such a cycle as defined in claim 35. In the present claims, friction may be measured not only at different times but also at different speeds – i.e., between 0 and 0.5 m/s and between 0.5 and 0 m/s, during a cycle. This is not contemplated, taught, or disclosed in Tomizawa.

Accordingly, the method of measuring friction performance of the present claims is significantly different from the procedure of Tomizawa. The only actual common feature between the cited reference and the present application is the use of the LFW-1 test apparatus. However, in the present claims, the LFW-1 is being used in a novel, nonobvious way to measure different characteristics of friction. The presently claimed method measures friction at speeds from about 0 to about 0.5 m/s and from about 0.5 to 0 m/s during a 40 second cycle, and the

process may be repeated many times. Therefore, static friction and dynamic friction may be measured, and thus the very useful value of the ratio of static to dynamic friction may be determined. The process disclosed in Tomizawa does not allow such measurements or calculations. Thus, the presently claimed method is both novel and nonobvious and provides a clear advantage over the cited reference.


Claims 36-51 depend from claim 35 and add important features and limitations to the presently claimed invention. Claims 36-51 are likewise patentable over Tomizawa. Reconsideration and allowance of claims 35-51 is hereby respectfully requested.

FEES

The undersigned believes that there are no fees associated with this filing. However, if the calculations are incorrect, the Commissioner is hereby authorized to charge any deficiencies in fees or credit any overpayment associated with this communication to Deposit Account No. 12-2355. Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account No. 12-2355.

Respectfully submitted,

LUEDEKA, NEELY & GRAHAM, PC

By: 
Leah Oubre Robinson
Reg. No. 44,990

Date: May 25, 2007
P.O. Box 18710
Knoxville, TN 37901
865-546-4305 Phone
865-934-5079 Direct Line
865-523-4478 Fax
lrobinson@lng-patent.com